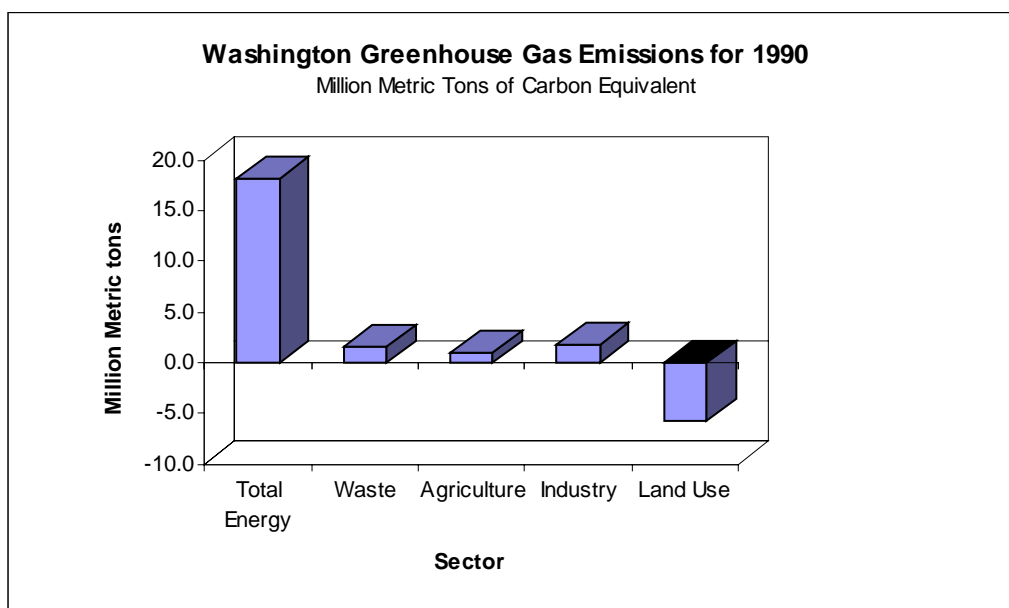


## WASHINGTON GREENHOUSE GAS EMISSIONS AND SINKS INVENTORY: SUMMARY



This report provides a detailed inventory of greenhouse gas emissions and sinks for Washington in 1990. Emissions were estimated using methods from EPA's 1992 guidance document ***State Workbook: Methodologies for Estimating Greenhouse Gas Emissions***. In 1990, Washington emitted 16.7 million metric tons of carbon equivalent (MMTCE). Washington estimated emissions of 2.8 MMTCE from biomass fuels and from other sources not included in the workbook methodology.<sup>1</sup> Emissions from these sources are not included in the reported total or the table below.

The principal greenhouse gases were carbon dioxide, comprising 45.9 million metric tons, and methane, with 0.4 million metric tons (2.4 MMTCE). Other emissions included 0.0008 million metric tons of perfluorocarbons (PFCs) (1.5 MMTCE), and 0.003 million metric tons of nitrous oxide (0.2 MMTCE).

The major source of carbon dioxide emissions was fossil fuel combustion (99%), with minor emissions from cement and lime production. Carbon dioxide sinks (timber stock and other forest resources) offset about 32% of the total carbon dioxide emissions. Contributors to methane emissions were landfills (67%), domesticated animals (19%), manure management (12%), and coal mining (2%). Nitrous oxide emissions were accounted for by fertilizer use, and perfluorocarbons were emitted from aluminum production.

Washington's emissions in 1990 were 3.4 MTCE per capita, compared to 1990 U.S. emissions of 6.4 MTCE per capita.

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<sup>1</sup> These emissions include carbon dioxide from aluminum production and landfills, and methane from range cattle and wetlands.

### Washington Greenhouse Gas Emissions for 1990

SECTOR	CO <sub>2</sub> (MMTCE)	Methane (MMTCE)	Nitrous Oxide (MMTCE)	PFCs (MMTCE)	Total GHG Emissions (MMTCE)
Energy - Residential	1.0	*	*	*	1.0
Energy - Commercial	1.0	*	*	*	1.0
Energy - Industrial	2.4	*	*	*	2.4
Energy - Transport	11.5	*	*	*	11.5
Energy - Utility	2.2	*	*	*	2.2
<b>Total Energy</b>	<b>18.1</b>	<b>0.1</b>	*	*	<b>18.2</b>
<b>Waste</b>	*	<b>1.6</b>	*	*	<b>1.6</b>
<b>Agriculture</b>	*	<b>0.8</b>	<b>0.2</b>	*	<b>1.0</b>
<b>Industry</b>	<b>0.2</b>	*	*	<b>1.5</b>	<b>1.7</b>
<b>Land Use</b>	<b>-5.8</b>	*	*	*	<b>-5.8</b>
<b>Total</b>	<b>12.5</b>	<b>2.4</b>	<b>0.2</b>	<b>1.5</b>	<b>16.7</b>

All emissions are reported in million metric tons of carbon equivalent (MMTCE).

An asterisk ( \* ) indicates that emissions of the gas from this sector were zero, insignificant, or not reported.

Emissions due to coal mining and extraction of natural gas and oil are included in the total energy figures, and emissions from biofuel combustion are excluded.